PIPE	11.25°				22.5°				45°			
SIZE	_L"	W"	Ή"	Vol.	L"	W"	Н"	Vol.	L"	W"	Н"	Vol.
3"	12	18	12	1.5	13	25	16	3.0	18	30	19	5.9
4"	12	24	16	2.6	16	30	18	5.0	22	36	24	11.0
6"	12	48	18	6.0	15	43	36	13.4	30	55	24	22.9
8"	12	63	24	10.5	18	57	34	20.2	36	57	33	39.2
12"	20	54	36	22.6	37	62	37	49.0	48	62	51	87.9
16"	31	65	38	44.3	60	65	39	88.1	65	65	65	159.2

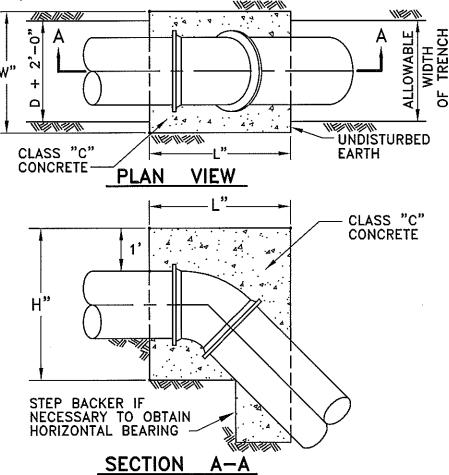
NOTES:

VOLUMES GIVEN IN CUBIC FEET.
BACKER TO BE CENTERED HORIZONTALLY ON BEND.
STEEL WILL BE USED AS REQUIRED BY THE ENGINEER.
ALL NEW PIPE 20" & LARGER SHALL BE RESTRAINED JOINT PER CCMS ITEM 801 UNLESS OTHERWISE PER PLAN

ALL NEW PIPE 20" & LARGER SHALL BE RESTRAINED JOINT PER CCMS TIEM 801 UNLESS OTHERWISE PER PLAN OR AS DIRECTED BY THE ENGINEER.

EXISTING WATER LINES 20" AND GREATER MUST HAVE PRIOR APPROVAL FROM DOW TO LOWER UNDER A PROPOSED UTILITY. APPROVAL WILL ONLY BE GIVEN UNDER SPECIAL CIRCUMSTANCES AND CONTINGENT UPON THE CONTRACTOR SUBMITTING A DESIGNED DRAWING, STAMPED BY A PROFESSIONAL ENGINEER, DETAILING HOW THE LOWERED WATER MAIN WILL BE RESTRAINED TO THE EXISTING WATER MAIN.

WHERE POLYETHYLENE ENCASEMENT IS REQUIRED, ALL GLANDS & BOLTS SHALL BE WRAPPED PRIOR TO PLACEMENT OF CONCRETE BLOCKING, SEE "L-1003".



CITY OF COLUMBUS DEPARTMENT OF PUBLIC UTILITIES DIVISION OF WATER APPROVED: RC Wester ADMINISTRATOR

5-14-13 DATE

STANDARD DETAIL

BACKING FOR VERTICAL BENDS (OVER BENDS ONLY)

L-6310

Revision Date: 1/2/13